Project: Willamette Valley National Wildlife Refuge Complex (WVNWRC) FY 2012 Invasive Species Management with Volunteers

Refuges: William L. Finley, Ankeny and Baskett Slough National Wildlife Refuges

Project Description: In 2012, the WVNWRC is proposing to continue with Year 5 of a major effort initiated in 2008 to control invasive species on the three Willamette Valley Refuges. As in past years, this project would focus on 13 different invasive plants including tansy ragwort, meadow knapweed, purple loosestrife, scotch broom, Fuller's teasel, Harding grass, reed canary grass, Armenian blackberry, false brome, yellow flag iris, English ivy, Japanese knotweed, and Canada thistle. All treatments sites from previous year would be inspected and results from the control efforts would be documented. Follow-up treatment actions would be determined during these initial inspections and then additional control efforts would be conducted as needed. Early Detection/Rapid Response elements are incorporated into the project. As in past years, the Refuge Complex has a 2012 goal to target 300 acres for invasive species detection/monitoring. Additional infestations would be mapped using standard GPS units. The Friends of the Willamette Valley National Wildlife Refuge Complex would be the primary partner to this effort, as they provide volunteer assistance with control efforts. The Friends will partner with several other groups such as local Audubon chapters in this endeavor. Refuge staff will coordinate control efforts and provide training to all of the volunteers. Control efforts would be accomplished using the most effective known techniques. Acres treated will be dependent upon invasive concentrations and density, effectiveness of treatments, and necessity of repeated treatments. IPM guidelines will be applied on an individual species basis.

Friends Groups, Volunteers and Other Partners: Our primary partner in this effort would be the Friends of the Willamette Valley National Wildlife Refuge Complex. Other groups that would provide volunteers towards the invasive species control efforts include Audubon Society of Corvallis, Salem Audubon Society, Greenbelt Land Trust, Oregon State University Sustainability students, OSU interns, and various local high schools. In addition, two Refuge Youth Conservation Corps programs at Finley and Baskett Slough Refuges would be assisting with control efforts.

This year the refuge is also pursuing programs providing middle and high school students with opportunities to become involved with invasive plant identification, mapping and eradication. Benton County SWCD and OSU Extension are partnering with Finley NWR to provide a site for Teen Weed Spotters, a high school earth science class. The refuge will also provide the site for a service project for a summer camp through OSU with a focus on invasive species eradication. An additional program is Project Budburst, which is being coordinated through the Institute for Applied Ecology working with various age groups from two schools. Students will be planting natives in restored areas previously treated for invasive weeds, some of which they grew in greenhouses at their schools.

Public Outreach and/or Environmental Education: Outreach efforts would continue at various events such as Refuge Open House (March), Oregon Gardens Earth Day (April),

and the Barns and Bluegrass event (May) at Finley Refuge. Outreach and environmental education efforts would also occur during regular meetings of the Friends, Audubon chapters, Greenbelt, etc. In addition, Refuge staff and Friends members would actively recruit volunteers at local high schools, OSU, and within the business communities of Corvallis, Monroe, Albany, Dallas, Monmouth, Independence and Jefferson. The Refuge Friends group would also provide outreach and educational materials through the Wild Goose Nature Store in the Complex Office. Environmental education would be a major part of the Youth Corps programs that would be assisting with this project as well as the various school programs focused on invasive species.

Post-treatment Monitoring: Refuge staff will continue with post treatment monitoring similar to what was completed in prior years when all control efforts were mapped. A summary was prepared after last years control efforts that documented work conducted, what control actions were employed, hours expended, costs, etc. We would prepare a similar summary documenting the work in 2012.

Criteria for Project Success: Several work party days are planned whereby Friends and other volunteers will be assisting Refuge staff with various control efforts. The goal of a minimum of 50 volunteers will be employed during these work days. All of these volunteers will be trained to identify and then conduct the proper control method in regards to multiple invasive species that exist on the WVNWRC.

Monitoring last years' treatment efforts and the effectiveness is a significant part of the 2012 proposed effort, and those results will help guide our future efforts. We plan to visit all of the prior years control sites to document the effectiveness of 2011 treatments and the protocol will be repeated in 2013. As in past years, we expect to find that our previous control efforts were largely successful, meaning that invasive species populations were reduced significantly on the majority of treated areas.

Increasing our effectiveness on controlling invasive species on the Willamette Valley Refuges will result in an improvement in the quality of habitat within several habitat types that are considered to be unique and rare such as wet prairie, upland prairie, oak savanna, and riparian while also contribute to recovering several endangered species. Examples are three listed plants and an endangered butterfly that relies on a host plant that is threatened by a variety of invasive plants.

The overall design and therefore ultimate success of the project is based on the various elements of Early Detection/Rapid Response. We have incorporated outreach and educational efforts, proper surveying, mapping and monitoring components and immediate treatment actions in order to help ensure a high degree of success.

Budget Request: $14,000

Temp/term staff salary (volunteer coordination, planning, reporting, monitoring)	$11,000
Fuel (equipment)	1,250
Transportation reimbursements (volunteers)	500
Herbicide purchase	500
Native seed	750

Total request	$14,000

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